

## **CLAIMS**

## What is claimed is:

- 1. A peptide compound, comprising about ten to about 50 amino acids in a sequence, wherein the peptide compound enhances bone growth, wherein each amino acid may be in D- or L- conformation, and wherein the sequence comprises a motif selected from the group consisting of an integrin binding motif, a glycosaminoglycan binding motif, and a calcium binding motif.
- 2. The peptide compound of claim 1, wherein the integrin binding motif is an RGD sequence.
- 3. The peptide compound of claim 1, wherein the glycosaminoglycan motif has the sequence SGDG.
- 4. The peptide compound of claim 1, wherein the calcium binding motif has the sequence DXDXSXFXGXXQ, wherein X is any amino acid.
- 5. The peptide compound of claim 4, wherein the calcium binding motif has the sequence DNDISPFSGDGQ.
  - 6. A multimer of the peptide of claim 1.
  - 7. A formulation comprising:
  - a carrier; and
  - a therapeutically effective amount of a peptide of claim 1.
- 8. The formulation according to claim 7, wherein the carrier is a saline solution and the formulation is injectable.



- 9. The formulation according to claim 7, wherein the carrier is a paste and the formulation is a toothpaste.
- 10. The formulation according to claim 7, wherein the carrier is an aqueous flavored solution and the formulation is a mouthwash.
- 11. A patch for oral delivery of a compound, said patch comprising a formulation according to claim 7.
- 12. A method of reducing bone loss, comprising administering to an individual an effective amount of a peptidic compound according to claim 1.
- 13. A method of reducing renal phosphate excretion in an individual, comprising administering to an individual an effective amount of a peptidic compound according to claim 1.